

A NEW SPECIES OF *RHODODENDRON* LINN.  
FROM ARUNACHAL PRADESH, INDIA<sup>1</sup>

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(With one text-figure)

**Key words:** Rhododendron, new species, Arunachal Pradesh

A new species of Rhododendron is described with illustrations. A comparative table of taxonomic characters is also appended here to distinguish the new taxon from the closely related species.

During plant explorations in the Lower Subansiri district, Arunachal Pradesh, an interesting species of rhododendron was collected in Tale Valley at 3,200 m altitude. It is an extremely elegant epiphytic shrubby species that grows among moss, lycopods and various lichens on fallen tree trunks. Its yellow funnel-campanulate flowers remain above the surrounding mossy carpet and its charming beauty at once catches the botanist's eye. The plant as a whole attains only half a metre in length, of which the lower creeping parts remain covered with moss and only the upper dichotomies with leaves are erect. A critical study of the specimens and scrutiny of the literature revealed it to be a new species, which was confirmed by Dr. H.H. Davidian of Royal Botanical Garden, Edinburgh, U.K.

The new species is placed under the subsection: *Lepidota*, section: *Rhododendron* of the subgenus: *Rhododendron*. Cullen (1983) recognized the subsection: *Lepidota* (Hutchinson) Sleumer [Bot. Jahrb. 74:531. 1949] as a small group of three species namely *R. lepidotum* Wall. ex. G. Don, *R. lowndesii* Davidian and *R. cowanianum* Davidian distributed mainly in the Himalayas. The subsection is characterized by: small shrubs or

shrublets up to 2 m; lower surface of leaves with broad translucent scales; inflorescence terminal, 1-5 flowered; calyx deeply 5-lobed; corolla usually lepidote outside; stamens 10 and actinomorphicly arranged; ovary lepidote; style impressed, short and sharply deflexed.

*Rhododendron nayari* sp. nov.

(Fig. 1)

*R. lowndesii* Davidian affine, sed fruticosis epiphyticis; foliis coriaceis, glabris, marginibus integribus, valde recurvatis; floribus solitariis, pedicellis 6-8 mm longis; calyces lobis oblongo-spathulatis, 6-10 mm longis; corollis campanulatis, apicibus loborum manifeste incisuratis; capsulisque oblongo-ellipsoides differt.

**Holotypus:** Arunachal Pradesh, Lower Subansiri district, Tale Valley, 3,200 m, 17.iv.1980, G.D. Pal 77690 A (CAL). Isotypi *Ibid.*, G.D. Pal 77690 B; *Ibid.*, G.D. Pal 77690 C & D (ARUN).

Small decumbent, epiphytic shrublets up to 50 cm tall, profusely branched; branches mostly dichotomous, woody, terete, 2-4 mm across; younger parts densely brownish or ferrugineo-brownish pilose, older parts become glabrate, rough; bark thin, grey or ashy-grey; leaf-scars prominent. Leaves whorled, 4-8 together, rarely ternate, crowded at the apices of branches, lower leaves deciduous; elliptic to

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NEW DESCRIPTIONS

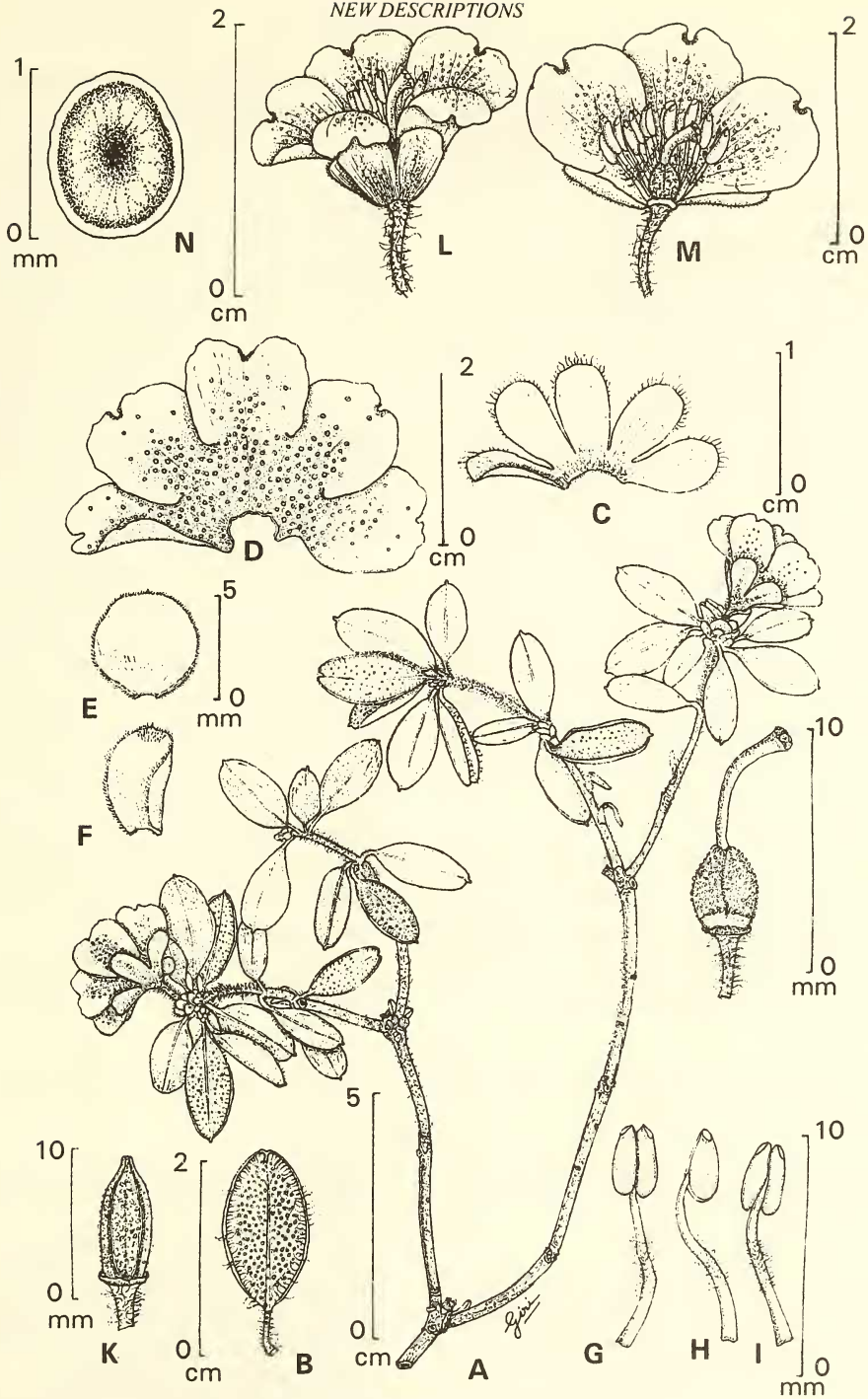


Fig. 1: *Rhododendron nayari* sp. nov.

A. Habit; B. Leaf (lower surface); C. Calyx; D. Corolla; E & F. Bracts; G-I. Stamens; J. Gynoecium; K. Capsule; L. Flower; M. Flower split open; N. Bud (enlarged, lower view).

elliptic-oblong, rarely obovate, (10 to) 16-20 (to 25) x (4 to) 8-11 (to 13) mm; acute to subrounded at base; obtuse or subrounded at the club-shaped mucronate apex; margins entire, strongly recurved, loriform setose; lateral nerves 6-8 on either side of midrib, hardly conspicuous; coriaceous, glabrous; upper surfaces dark green, sparsely lepidote or not, turn dark brown; lower surfaces dull green, profusely lepidote with scales, become light brown or grayish-brown on drying; scales golden-brown, nearly uniform, circular in outline, sunken in pit, shortly stalked, central part flattened, rim broad, translucent; petioles (1.5 to) 2.5-5 (to 6.5) mm long, ferrugineo-brownish pilose, often intermixed with a few scales; sometimes sessile scaly leaves appear in between whorl of leaves; scaly leaves lanceolate or narrowly oblong, 6-15 mm long, ciliate. Winter buds ovate; bud-scales imbricate. Flower solitary, terminal; pedicels 6-8 mm long, densely ferrugineo-brownish pilose and lepidote; bracts in series, imbricate, often cover the lower half of pedicels, reddish, coriaceous, broadly oblong to suborbicular, (2 to) 4-5 (to 7) x (2 to) 4-4.5 (to 6) mm, rounded at mucronate apex, dorsally glabrous, ventrally glabrous or finely whitish tomentose at apices, ciliate. Calyx deeply 5-lobed, yellowish; tube about 2 mm long, ferrugineo-brownish pilose and lepidote at very

base; lobes unequal, oblong-spathulate, 6-10 x 4.5-6 mm, membranous, glabrous, rarely with a few scales on dorsal surface, filiform-acicular ciliate at apical margin. Corolla yellow, campanulate or funnel-campanulate; tube 7-9 mm long; lobes broadly obovate-oblong to suborbicular, 6-9 x 8-12 mm, distinctly notched at apex; corolla-tube and crest of lobes dorsally covered with golden-brown, translucent, domed scales; scales sparse or even absent towards margin; pits shallow. Stamens 10; filaments unequal, 5-8 mm long, Actinomorphyically arranged, brownish pilose at or near the middle; anthers black, oblong, 2.5-3 x 1.5 mm, emarginated at apex, bilobed, each lobe opens by a large, terminal, oblique pore. Ovary ellipsoid, 5-locular, about 3 x 2.5 mm, densely lepidote with scales; scales absent at base; style impressed into the top of ovary; deflexed at or above the middle, glabrous; stigma swollen, consisting of five fleshy lobes. Capsules oblong-ellipsoid, 6.5-7 x 3.5-4 mm, lepidote with scales when young; older capsules glabrate, rugose, breaking into five strong, woody, straight valves, placenta not separating from central axis; seeds fusiform, about 4 mm long, unwinged and without a distinct tail.

**Type:** Arunachal Pradesh, Lower Subansiri district, Tale Valley, 3,200 m,

TABLE I  
DISTINGUISHING CHARACTERS OF *RHODODENDRON LOWNDESII* AND *R. NAYARI*

<i>Rhododendron lowndesii</i> Davidian	<i>R. nayari</i> sp. nov.
1. Small lithophytic, creeping, pubescent shrublets, about 10 cm high.	1. Small epiphytic, decumbent, glabrous shrubs, about 50 cm high.
2. Leaves thin, pubescent; margins slightly crenate, hairy.	2. Leaves coriaceous, glabrous; margins entire, strongly recurved, loriform-setose.
3. Inflorescence 1-2 flowered; pedicels 2.5-4.3 cm long.	3. Flower solitary, terminal; pedicels 6-8 mm long.
4. Calyx-lobes ovate or ovate-oblong, 2.5-3.5 mm long	4. Calyx-lobes oblong-spathulate, 6-10 mm long.
5. Corolla rounded or bell-shaped, red-spotted or streaked; lobes rounded without notch.	5. Corolla campanulate or funnel-campanulate, yellow; lobes prominently notched at apex.
6. Ovary cone shaped; style short, much curved.	6. Ovary ellipsoid; style about 5 mm long, slightly deflexed after anthesis at or above the middle.
7. Capsules cylindrical, c. 5 mm	7. Capsules oblong-ellipsoid, 6.5-7 mm.

NEW DESCRIPTIONS

17.iv.1980, G.D. Pal 77690 A (Holotype CAL).  
Isotypes: *Ibid.*, G.D. Pal 77690 B; *Ibid.*, G.D.  
Pal 77690 C & 77690 D (ARUN).

**Fl. & Fr.:** March-May.

**Ecology:** Grows on tree trunks in moist,  
shady places at higher elevations and is  
associated with various species of mosses,  
lycophods, lichens and bamboos.

*Rhododendron nayari* sp. nov. is closely  
allied to *R. lowndesii* Davidian, but the former  
can be easily distinguished by glabrous,  
coriaceous leaves with loriform-setose margin;  
solitary, terminal flower with smaller pedicel;  
large, oblong-spathulate calyx-lobes; corolla-  
lobes distinctly notched at apex and oblong-  
ellipsoid capsules (Table 1).

The specific epithet of this beautiful  
rhododendron is given in honour of Dr. M.P.

Nayar, Ex-Director, Botanical Survey of India  
for his valuable contribution to the  
understanding of the taxonomy of Indian  
plants.

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